

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Original) A transmitter for transmitting a signal to a subscriber station through at least two transmit antennas, the transmitter comprising:

means for transmitting a distinguishable pilot signal through each of the at least two transmit antennas;

means for receiving channel estimate information corresponding to said per-antenna pilot signals;

means for generating pre-correction delays and weights based on said channel estimate information; and

means for transmitting a data signal through the at least two transmit antennas based on said pre-correction delays and weights.

2. (Original) A method for transmitting a signal to a subscriber station through at least two transmit antennas, the method comprising:

transmitting a distinguishable pilot signal through each of the at least two transmit antennas;

receiving channel estimate information corresponding to said per-antenna pilot signals;

generating pre-correction delays and weights based on said channel estimate information;

and

transmitting a data signal through the at least two transmit antennas based on said pre-correction delays and weights.

3. (Original) A computer readable media embodying a method for transmitting a signal to a subscriber station through at least two transmit antennas, the method comprising:

transmitting a distinguishable pilot signal through each of the at least two transmit antennas;

receiving channel estimate information corresponding to said per-antenna pilot signals;

generating pre-correction delays and weights based on said channel estimate information;
and

transmitting a data signal through the at least two transmit antennas based on said pre-correction delays and weights.

4. (Original) A base station apparatus comprising:
at least two transmit antennas;

a mixer corresponding to each of said at least two transmit antennas, for applying a per-antenna cover code to a pilot signal to be transmitted through each of said at least two transmit antennas;

receiver for receiving channel estimate information corresponding to said per-antenna pilot signals for at least two transmit paths per transmit antenna;

pre-correction processor for generating pre-correction delays and weights based on said channel estimate information; and

a transmitter corresponding to each of said at least two transmit antennas, for transmitting a data signal through said at least two transmit antennas, wherein the data signal transmitted through each of said at least two transmit antennas is adjusted based on said pre-correction delays and weights.

5. (Currently Amended) A receiver for receiving a data signal transmitted from at least two transmit antennas and through at least two transmit paths, the receiver comprising:

means for measuring channel information corresponding to each combination of one of the at least two transmit antennas and one the at least two transmit paths wherein the data signal transmitted through each of said at least two transmit antennas is adjusted based on pre-correction delays and weights; and

means for transmitting said channel information.

6. (Currently Amended) A method for receiving a data signal transmitted from at least two transmit antennas and through at least two transmit paths, the method comprising:

measuring channel information corresponding to each combination of one of the at least two transmit antennas and one the at least two transmit paths wherein the data signal transmitted through each of said at least two transmit antennas is adjusted based on pre-correction delays and weights; and

transmitting said channel information.

7. (Currently Amended) A computer readable media embodying a method for receiving a data signal transmitted from at least two transmit antennas and through at least two transmit paths, the method comprising:

measuring channel information corresponding to each combination of one of the at least two transmit antennas and one the at least two transmit paths wherein the data signal transmitted through each of said at least two transmit antennas is adjusted based on pre-correction delays and weights; and

transmitting said channel information.

8. (Currently Amended) A remote station apparatus for receiving signals transmitted from at least two transmit antennas and through at least two transmit paths, the apparatus comprising:

at least four channel estimators, wherein each channel estimator measures channel information corresponding to a signal received through a different combination of one of the at least two transmit antennas and one of the at least two transmit paths wherein the signal transmitted through each of said at least two transmit antennas is adjusted based on pre-correction delays and weights; and

channel estimate processor for generating channel estimate information based on said measured channel information.
